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# SCIENCE

FRIDAY, SEPTEMBER 14, 1917

## CONTENTS

<i>Organized Knowledge and National Welfare:</i> DR. P. G. NUTTING .....	247
<i>The Proof of Microbial Agency in the Chemical Transformations of Soil:</i> DR. JOEL CONN .....	252
<i>The First Pueblo Ruin in Colorado mentioned in Spanish Documents:</i> DR. J. WALTER FEWKES .....	255
<i>Scientific Events:—</i>	
<i>The Production of Nitrates by the Government; The Army Aviation School at the University of California; Appointments in the Ordnance Department of the Army</i> ....	256
<i>Scientific Notes and News</i> .....	259
<i>University and Educational News</i> .....	261
<i>Discussion and Correspondence:—</i>	
<i>Tests of Radiator Humidifiers:</i> DR. E. P. LYON. <i>A New Meteorite:</i> HENRY L. WARD. <i>Filing Pamphlets:</i> W. R. MILLER .....	262
<i>Quotations:—</i>	
<i>Financial Support for the National Research Council</i> .....	264
<i>Scientific Books:—</i>	
<i>McAdie on The Principles of Aerography:</i> DR. CHARLES F. BROOKS. <i>Bulkley on Cancer, its Cause and Treatment:</i> DR. LEO LOEB. ....	264
<i>The Vanishing Indian:</i> DR. ALEŠ HRDLÍČKA. ....	266
<i>On a Sudden Outbreak of Cotton Rust in Texas:</i> J. J. TAUBENHAUS .....	267
<i>Special Articles:—</i>	
<i>The Effects of Acids and Salts on "Bio-colloids":</i> DR. D. T. MACDOUGAL AND H. A. SPOEHR .....	269

## ORGANIZED KNOWLEDGE AND NATIONAL WELFARE<sup>1</sup>

THE future of any nation is secure if it lives up to its possibilities. The nation which does this is bound to be a leader among nations and to command world-wide respect. Its national problems will be solved and solved intelligently and thoroughly. The greatness of a man is in part born in him and in part the product of his environment. According to eminent biologists, he is about two fifths born and three fifths made. Similarly, a nation is great according to its resources and according to its development of these resources. And the development of those resources may be accomplished only through organized knowledge.

I. *The Function of Organized Knowledge.*—Consider for a moment two manufacturing concerns on an equal footing as regards output, but of which one is continually making progress through improvements in manufacturing processes, developing new and valuable products and investigating the fundamental principles underlying all these processes. This firm will in time outstrip the other in every way; the balance, in fact, is a very delicate one, since the results are cumulative. In quite a similar manner, that nation will advance to leadership in which the increase in organized knowledge and the application of that knowledge are greatest. For this reason, interest in research should be as wide as the nation and should cover the

MSS. intended for publication and books, etc., intended for review should be sent to Professor J. McKeen Cattell, Garrison-on-Hudson, N. Y.

<sup>1</sup> Abstract of an address given April 9, 1917, to the Associated Engineering Societies of Worcester.